

## **MODIS TECHNICAL TEAM MEETING**

**June 11, 1999**

Vince Salomonson chaired the MODIS Technical Team Meeting. Present were Bill Barnes, Francesco Bordi, Barbara Conboy, Wayne Esaias, Al Fleig, Bruce Guenther, Dorothy Hall, Steve Kempner, Ed Masuoka, Harry Montgomery, Bob Murphy, Mike Roberto, Dan Tarpley (NOAA), and Eric Vermote, with Deborah Howard recording the minutes.

### **1.0 SCHEDULE OF EVENTS**

Mini-SWAMP Meeting at EOS-IWG (Vail, CO)	June 15–17, 1999
IGARSS '99 (Hamburg, Germany)	June 28–July 2, 1999
PI Processing Meeting (GSFC) Building 32, Room E103	July 13, 1999, 9:30 a.m. (Tuesday)
Semi-annual Reports Due (For January–June 1999)	July 15, 1999
SAFARI Program Implementation Meeting (Gaborone, Botswana)	July 26–30, 1999
Terra Launch Vandenberg Air Force Base	No earlier than August 27, 1999
AGU 1999 Fall Meeting (San Francisco, CA)	December 13–17, 1999
AGU 2000 Spring Meeting (Washington, DC)	May 30–June 3, 2000
IGARRS '00 (Honolulu, HI)	July 24–28, 2000
EOS-PM Launch	December 2000

Note: The PI Processing meeting is usually held on a Wednesday. Please note that the July meeting will be held on a Tuesday. Also, no PI Processing Meeting is scheduled for August. Meetings will resume in September.

## **2.0 MINUTES OF THE MEETING**

### **2.1 Overview**

Vince Salomonson began the MODIS Technical Team meeting with a brief discussion on who will present on MODIS-related topics at the upcoming SWAMP meeting. Salomonson and Murphy agreed that one of them would present on PM and one on AM. Salomonson asked Murphy to coordinate with the presenter of the direct broadcast session at the meeting to assure that MODIS issues are included. Although Masuoka does not plan to attend, he will prepare some charts on MODIS for the SWAMP meeting.

Salomonson asked about plans for presenting MODIS early results. He recommended that Discipline Leaders give presentations on MODIS at the AGU 2000 Spring Meeting next spring and at the IGARSS 2000 meeting next July. If the Terra launch takes place early enough, then MODIS should also consider presenting at the AGU 1999 Fall Meeting scheduled for December 1999.

### **2.2 Instrument Report**

Mike Roberto reported that thermal vacuum testing on FM-1 started recently; it should be pumped down now. It is in outgassing mode and looks good at this point. The instrument will be in thermal vacuum for about 30 days. Salomonson asked about RVS. Guenther replied that he has some reservations about bands 27 through 30.

Roberto confirmed an August 1 delivery. He said that the thermal vacuum includes three temperature plateaus and two detector temperatures. He also reported that MODIS is bonding the position switches on doors for PFM. This precaution is related to the failure of the diffuser door fail-safe to open the door on FM-1. Although there is no indication of any movement with PFM doors, the bonding switches are to assure that they will not move. This should be completed by next Monday, June 14. When Salomonson asked whether he was 99.99% sure that the doors would not stick, Roberto replied yes.

Roberto mentioned that the Terra launch has been rescheduled and will not take place before August 27. Murphy asked if there was still a DOD payload that could displace us from the launch pad if we didn't launch in August. Roberto replied that he has heard that Terra is clear to launch through October.

Salomonson asked about other instrument-related information. Guenther said that MCST delivered version 2.2 of the Level 1B code at the end of May. SDST processed the package and sent it to the GDAAC in only 4 hours. Salomonson asked whether MCST is ready for launch and Guenther replied that MCST is ready for launch. However, Guenther would like MCST to go to launch with

further improvements to the code, using a July 15 delivery if possible.

### **2.3 SDST**

Masuoka reviewed the Launch Ready PGE Status dated 6/11/99 (Attachment 1). He said that all cloud properties soon would be back to a green status and that all Level 2 snow is done. Oceans is running with Miami's assistance. Today, L3 interim daily Oceans will run. Esaias said that this has been a big step forward and Masuoka acknowledged Sue Walsh's assistance. Masuoka said that Land products through 8-day Land are done and that the Land team has been giving SDST a lot of help on the loaders.

Salomonson asked for a definition of Level 4 and whether all three of Running's PGEs that are listed as Level 4 should be Level 3 (see Attachment 1). Vermote said that, strictly speaking, Level 4 products are model outputs, and thus Running's products might have been better described as Level 3. There is no plan to change the categorization. Salomonson asked about Oceans productivity and Esaias replied that Level 3-4 products would be made operational post-launch, or at least after all other Oceans products are completed.

In response to a question by Salomonson, Kempler reported that Raytheon came in to the GDAAC and helped with code that they (Raytheon) had developed.

### **2.4 GDAAC Report**

Kempler reviewed the GDAAC Notes for MODIS Technical Team Meeting dated 6/10/99 (Attachment 2) and the Demonstrated Operations Status of GDAAC Mission-Critical Capabilities dated 5/26/99 (Attachment 3). He said that he would talk with MCST about how to get their Level 1B code running in a more timely manner. Kempler reported that a data problem due to a SCSI problem has been corrected.

Masuoka commented that the version of geolocation running in OPS is not the latest one—v2.1.1 is being tested. Salomonson asked Kempler to define some of the headings on Attachment 3. Kempler explained that "Functionality Demonstrated" means that the code works at the DAAC in Ops mode on the most recent version of 4PY. Functionality was demonstrated for all except ingest and archive of NCEP. "Performance Isolated" indicates how fast a code works in isolation. Performance Isolated has been assessed for most ingests and some archives, but not for production and distribution. "Demonstrated Under Load" refers to performance when the system is under full load. None of the activities have been checked under load.

Esaias asked about the status of PGE 71, listed near the top of Attachment 1. Kempler replied that the GDAAC is waiting for ECS to produce the ESDT for PGE 71. Masuoka added that it might also be possible for SSTG to deliver PGE

53. Kempler concluded that overall, progress is being made.

## **2.5 L1 Product Suite**

Salomonson said that Bordi will be reporting on Level 1 integration issues at MODIS Technical Team meetings on an ongoing basis. Bordi reviewed MODIS Level 1 Integration Issues (Attachment 4), including a schedule for L1 product suite integration. The MODIS L1 Product Suites Working Group developed this schedule and list of issues in their two recent meetings. Salomonson asked Bordi if he could use a critical path format to present updates to the Technical Team and Bordi agreed to revise the format.

Bordi said that issue #3, delivery of synthetic data, is closed. Version 2.1.5 for L1B will be used for the Mission Operation Science System-2 (MOSS-2) test scheduled for June 27. Salomonson asked whether issue #5, regarding re-implementation of the ECS GDAS interface, was related to NOAA. Bordi replied yes.

Salomonson asked Tarpley when MODIS would get to participate in a data product review board with NOAA. Tarpley said that would happen when products are to be released post-launch.

Bordi continued with issue #6 regarding the test dataset for L1A. He said that the issue is closed and the test dataset has been delivered to the DAAC. For issue #7, an ESDT is to be developed by ECS. Bordi said that he has not discussed issue #10, regarding DAAC processing requirements to support PGE55, with Mike Moore yet (see Attachment 4).

## **2.6 PI Processing Meeting**

Vermote reported on the recent PI Processing meeting. The meeting included a detailed schedule for the Y-day test and the X-day test went well. Vermote showed samples of L1B data, including surface reflectance and fire products to the Technical Team. He said it uses less than the full swath. Salomonson asked whether the orbit fills in the gaps the next day and Vermote said it does. He said that Level 1B with scaling can be adjusted in the center of the swath, artificial aerosol is an artifact, and these were based on calculated simulated data. Fleig added that for synthetic data, fire is put down in random locations.

## **2.7 MAST Report**

Conboy said she has not yet received the Oceans inputs for the PM-1 Data Products Handbook. The revised date for inputs for the PM-1 Data Products Handbook is June 17.

## **2.8 Snow and Ice**

Hall reported that she or members of her team presented MODIS-related

information last week at the 1999 Spring AGU Meeting and the Eastern Snow Conference, and she plans to present a MODIS paper at an upcoming International Glaciological Society (IGS) meeting scheduled for August.

## **2.9 Oceans**

Esaias reported that cruise planning is still underway. Since we are locked into the October cruise, it will be necessary to shift the focus from initialization of MODIS to a process study addressing issues such as absorbing aerosols that will benefit SeaWiFS and MODIS. The plans include examining filaments near Baja California. Esaias said that the Oceans group would still need an initialization cruise after Terra launches with MODIS. He reported still working to get the final ESDTs to describe the maps of productivity even though this is a post-launch product to keep it in the baseline.

## **2.10 MODLAND**

Vermote said that Jeff Morrisette and Chris Justice are representing MODIS in London at the CEOS Cal/Val workshop. Robert Wolfe represented MODIS at the EDC DAAC Science Advisory Panel (SAP) meeting.

Vermote said that the Land ATBDs are fine. He said that Justice would like to have a room available at GSFC to conduct QA activity. A temporary, soundproof enclosure in the computer area would work well. Masuoka said he would check on the availability of such a room.

# **3.0 ACTION ITEMS**

## **3.1 Action Items Carried Forward**

1. To Discipline Leaders and Support Team Leaders: Inputs for the EOS Data Products Handbook PM-1 Vol. 2 are due to Barbara Conboy by May 24, 1999.

Status: This item remains open. Conboy is waiting for Oceans inputs. The revised date for inputs for the PM-1 Data Products Handbook is June 17, 1999.

2. Murphy: Create a mechanism for coordinating MODIS operations and other schedules that includes an interactive listing. It should be more than a passive posting of schedules on the World Wide Web. Such an interactive schedule could be used by MODIS science discipline teams to coordinate field campaigns or by the operations group to coordinate MODIS activities with the other Terra instruments' activities.

Status: This item remains open.

3. Hohner and Howard: Develop a weekly MODIS news page linked to the

MODIS home Web site. It should include hot items and reflect weekly progress.

Status: This item remains open.

4. Murphy: Investigate the status of direct broadcast and present an update to the Technical Team.

Status: This item remains open.

5. Masuoka: Submit an EOS-PM Data Product Update to ESDIS.

Status: This action item remains open.

6. Masuoka: Examine status of DAO ancillary products for MODIS.

Status: This item remains open.

7. Barnes: Work with Wayne Esaias to complete the written and vugraph versions of the Oceans Validation Plan.

Status: This action item remains open. Esaias has submitted the narrative version of the Oceans Validation Plan to Michael King. The vugraph version is pending.

### **3.2 Closed Action Items**

1. To MODIS Community: Last call for Terra Launch; updates/additions due to Barbara Conboy by May 20, 1999.

Status: Conboy submitted MODIS' list to PAO . Since launch has been postponed, additional updates/additions are forwarded to PAO when received.

2. Murphy: Clarify the data release agreements between NASA and NOAA on MODIS data, including MODIS requirements and which of these requirements NOAA will accommodate. Discuss these items with Legg and Tarpley of NOAA.

Status: This item is closed. It was agreed to have MODIS representatives serve on the NESDIS data product review boards.

3. Murphy: Follow up on the status of the PI Processing working agreement with ESDIS.

Status: This item is closed as of March 11, 1999. The conveyance memo from SDDTs and Discipline Leaders was signed.